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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,474	08/05/2003	Donald R. Loveday	1999U026.US-CON2	6827

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UNIVATION TECHNOLOGIES LLC  
5555 SAN FELIPE, SUITE 1950  
HOUSTON, TX 77056

EXAMINER

PASTERCZYK, JAMES W

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 07/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/634,474	<b>Applicant(s)</b> LOVEDAY ET AL.	
	<b>Examiner</b> J. Pasterczyk	<b>Art Unit</b> 1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 May 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1. This Office action is in response to the RCE amendment filed 5/27/04.

2. Claims 1-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, the third line after the structure defining y is now no longer necessary since the structure having a y variable has been cancelled. Likewise, in the second line after that "or YXL'" should be removed and "groups" made singular. In the line defining R<sup>1</sup> and R<sup>2</sup>, insert --or-- before "a heteroatom".

The examiner notes that the rejections based on *Ex parte Slob* are withdrawn due to convincing argument, specifically that the claims of *Slob* were drawn to an exclusively functional description of a composition, while the present claims have only some functional recitation along with sufficient composition structure to meet the 35 USC 112, first paragraph description requirement.

3. Claims 1-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The claims recite that when the reaction temperature increases the Mw/Mn ratio decreases and vice versa. Applicants then cite to one particular example in the specification where a change in reaction temperature of 5 deg C results in this recited change in molecular weight distribution. However, as applicants admit, "most all other parameters of the polymerization process" were not otherwise kept constant, hence it is unclear that the

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temperature difference alone accomplished the change in molecular weight distribution. Also, one poorly-executed showing of a change in temperature of 5 deg C (along with changes in other parameters) is scarcely enough to demonstrate a universal trend or correlation between reaction temperature and molecular weight distribution of the polymer produced.

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugimura as cited in and for the reasons of record given in paragraph 5 of the previous Office action.

The examiner notes that in Sugimura paragraphs 104, 110, 112, 138 and 140 are found examples of titanium compounds having a group 15 or 16 atom bridging between the two amido groups. Given that titanium is an electron poor metal and the requirements of the 18 electron rule it is considered logical that the bridging atoms having lone pairs would form dative bonds between the metal and main group atoms, and thus there would be that central bond between the metal and the organic ligand.


6. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sugimura in view of Liang, McConville, and Schrock as cited in and for the reasons of record given in paragraph 6 of the previous Office action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Pasterczyk whose telephone number is 571-272-1375. The examiner can normally be reached on M-F from 8:30 to 5 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell, can be reached at 571-272-1362. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**Mark L. Bell**  
Supervisory Patent Examiner  
Technology Center 1700



J. Pasterczyk

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6/30/04